

REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 12-43 remain pending in the application. Claims 1-11 were previously canceled. By the foregoing amendment, claim 12 is amended.

In numbered paragraph 3, page 2 of the Office Action, claims 1-43 are rejected as being anticipated by U.S. Patent 6,287,674 (Verlinden et al.). In numbered paragraph 4, page 3 of the Office Action, claims 1-43 are rejected as being anticipated by U.S. Patent 6,197,418 (Cloots et al.). In numbered paragraph 7, page 4 of the Office Action, claims 1-43 are rejected as being unpatentable over JP 09270573 in view of the Verlinden et al. patent or the Cloots et al. patent. These rejections are respectfully traversed.

Applicants have disclosed a method of manufacturing a multi-layer pc board for the assembly of electronic devices. As exemplified in Fig. 1, a pc board comprises at least one layer whose thermal expansion properties correspond approximately to the thermal expansion properties of the electronic devices and, at the same time, determine essentially the thermal expansion properties of the multi-layer pc board. For example, a glass laminate structure finds use in electric or semiconductor devices as well as displays, photovoltaic cells or light emitting diodes.

The method comprises joining a thin glass foil to at least one other layer of the multi-layer pc board via a resin formulation and pressing so as to form a laminate, wherein the thin glass foil is configured as a borosilicate glass layer and has a thickness of 30 micrometers to 1100 micrometers, wherein said thin glass foil is processed in a roll-to-roll process and/or thermally moulded.

The foregoing features are broadly encompassed by claim 12 which recites a method of manufacturing a multi-layer pc board for the assembly of electronic devices, including, among other recited features, joining a thin glass foil to at least one other layer of the multi-layer pc board via a resin formulation and pressing so as to form a laminate, wherein the thin glass foil is configured as a borosilicate glass layer and has a thickness of 30 micrometers to 1100 micrometers, wherein said thin glass foil is processed in a roll-to-roll process and/or thermally moulded.

The Verlinden et al. patent discloses a flexible laminate in which a thin borosilicate glass substrate is bonded to a transparent plastic support. Borosilicate is used to improve the thermal stability, hardness and scratch resistance of a flexible laminate into which the borosilicate is bonded (abstract). However, the Verlinden et al. patent does not relate to a rigid pc board comprising at least one layer whose thermal expansion properties correspond approximately to the thermal expansion properties of the electronic devices. The Verlinden et al. patent does not teach or suggest joining a thin glass foil to at least one other layer of the multi-layer pc board via a resin formulation and pressing so as to form a laminate, wherein said thin glass foil is processed in a roll-to-roll process and/or thermally moulded, as recited in claim 12.

The Cloots et al. patent discloses an electroconductive glass laminate having a substrate and an organic electroconductive layer provided on said substrate, the substrate comprising a glass layer and a support (abstract). The disclosed electroconductive material is disclosed for use as an electrode in displays, photovoltaic cells or light-emitting diodes. However, the Cloots et al. patent does not teach a rigid pc board comprising at least one layer whose thermal expansion

properties correspond approximately to the thermal expansion properties of the electronic devices. The Cloots et al. patent does not teach or suggest joining a thin glass foil to at least one other layer of the multi-layer pc board via a resin formulation and pressing so as to form a laminate, wherein said thin glass foil is processed in a roll-to-roll process and/or thermally moulded, as recited in claim 12.

The Examiner admits at page 4 of the Office Action that "JP 09270573 does not specifically require borosilicate glass as the glass layer." Applicants respectfully submit that JP 09270573 does not teach or suggest joining a thin glass foil to at least one other layer of the multi-layer pc board via a resin formulation and pressing so as to form a laminate, wherein said thin glass foil is processed in a roll-to-roll process and/or thermally moulded, as recited in claim 12.

Even if combined as suggested by the Examiner, the combination of Verlinden et al. patent, the Cloots et al. patent, and the JP 09270573 publication, do not result in a method of manufacturing a multi-layer pc board for the assembly of electronic devices, including, among other recited features, joining a thin glass foil to at least one other layer of the multi-layer pc board via a resin formulation and pressing so as to form a laminate, wherein the thin glass foil is configured as a borosilicate glass layer processed in a roll-to-roll process and/or thermally moulded, as recited in claim 12.

For the foregoing reasons, Applicant's claim 12 is allowable. The remaining claims depend from the independent claim and recite additional advantageous features which further distinguish over the document relied upon by the Examiner. As such, the present application is in condition for allowance.

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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